

## **Australian Bureau of Statistics**

6202.0.55.001 - Labour Force, Australia, Spreadsheets, Dec 2005

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# **Summary**

### **About this Release**

A set of Excel spreadsheets with summary results of the monthly Labour Force Survey containing estimates of employed and unemployed persons classified by sex, full-time/part-time status, states and territories and some age groups; and persons not in the labour force.

Data from the monthly Labour Force Survey are released in two stages. The **Labour Force**, **Australia**, **Spreadsheets** (cat. no. 6202.0.55.001) product set is part of the first release, and includes data corresponding to the tables contained in the **Labour Force**, **Australia** (cat. no. 6202.0) publication.

Since these products are based on the same data as the **Labour Force**, **Australia** (cat. no. 6202.0) publication, the **6202.0 Labour Force**, **Australia Main Features** are relevant to both releases.

# **Explanatory Notes**

### **Explanatory Notes**

#### INTRODUCTION

1 This publication contains estimates of the civilian labour force derived from the Labour Force Survey component of the Monthly Population Survey. The full time series for estimates from this publication are also available electronically - see **Labour Force**, **Australia**, **Spreadsheets** (cat. no. 6202.0.55.001). More detailed estimates are released one week after this publication in various electronic formats - see **Labour Force**, **Australia**, **Detailed - Electronic Delivery** (cat. no. 6291.0.55.001).

#### **CONCEPTS, SOURCES AND METHODS**

2 The conceptual framework used in Australia's Labour Force Survey aligns closely with the standards and guidelines set out in Resolutions of International Conferences of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling the estimates, are presented in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001) which is available on the ABS web site <a href="https://www.abs.gov.au">https://www.abs.gov.au</a> (Methods, Classifications, Concepts & Standards).

#### LABOUR FORCE SURVEY

- **3** The Labour Force Survey is based on a multi-stage area sample of private dwellings (currently about 30,000 houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.), and covers about 0.45% of the population of Australia. Information is obtained from the occupants of selected dwellings by specially trained interviewers.
- **4** The information is collected using computer-assisted interviewing (CAI), whereby responses are recorded directly onto an electronic questionnaire on a notebook computer. The CAI method was progressively implemented from October 2003 to August 2004, replacing the 'pen and paper' method previously used.
- **5** Households selected for the Labour Force Survey are interviewed each month for eight months, with one-eighth of the sample being replaced each month. The first interview is conducted face-to-face. Subsequent interviews are conducted by telephone (if acceptable to the respondent).
- 6 The interviews are generally conducted during the two weeks beginning on the Monday between the 6th and 12th of each month. The information obtained relates to the week before the interview (i.e. the reference week). Each year, to deal with operational difficulties involved with collecting and processing the Labour Force Survey around the Christmas and New Year holiday period, interviews for December start four weeks after November interviews start, and January interviews start five weeks after December interviews start. As a result, January interviewing may commence as early as the 8th or as late as the 14th, depending on the year. Occasionally, circumstances that present significant operational difficulties for survey collection can result in a change to the normal pattern for the start of interviewing.
- **7** Estimates from the Labour Force Survey are published first in this publication 31 days after the commencement of interviews for that month, with the exception of estimates for each December which are published 38 days after the commencement of interviews.

#### **SCOPE OF SURVEY**

**8** The Labour Force Survey includes all persons aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

#### **COVERAGE**

**9** In the Labour Force Survey, coverage rules are applied which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection. The coverage rules are necessarily a balance between theoretical and operational

considerations. Nevertheless, the chance of a person being enumerated at two separate dwellings in the survey is considered to be negligible.

#### POPULATION BENCHMARKS

**10** Labour Force Survey estimates are calculated in such a way as to add up to independent estimates of the civilian population aged 15 years and over (population benchmarks). From February 2004, labour force estimates have been compiled using benchmarks based on the results of the 2001 Census of Population and Housing. Revisions were made to historical estimates from January 1999 to January 2004.

#### **COMPARABILITY OF SERIES**

- **11** From April 1986, the definition of employed persons was changed to include persons who worked without pay between 1 and 14 hours per week in a family business or on a farm (i.e. contributing family workers). For further information, see paragraphs 36 and 37 of the Explanatory Notes to the February 1987 issue of **Labour Force, Australia** (cat. no. 6203.0).
- 12 The ABS introduced telephone interviewing into the Labour Force Survey in August 1996. Implementation was phased in for each new sample group from August 1996 to February 1997. During the period of implementation, the new method produced different estimates than would have been obtained under the old methodology. The effect dissipated over the final months of implementation and was no longer discernible from February 1997. The estimates for February 1997 and onwards are directly comparable to estimates for periods prior to August 1996. For further details, see the feature article in the June 1997 issue of Labour Force, Australia (cat. no. 6203.0).
- 13 From April 2001 the Labour Force Survey has been conducted using a redesigned questionnaire containing additional data items and some minor definitional changes. The definition of unemployed persons was changed to include all persons who were waiting to start work and were available to start in the reference week. This change was introduced in February 2004, when historical unit record data were revised from April 2001 to January 2004. This revision created a small trend break at April 2001 in unemployed persons and unemployment rate series. For further details, see Information Paper: Forthcoming Changes to Labour Force Statistics (cat. no. 6292.0).
- 14 Core labour force series were revised in April 2001 for the period April 1986 to March 2001 for the remaining definitional changes introduced with the redesigned questionnaire, to reduce the impact of the changes on labour force series. For further details, see Information Paper: Implementing the Redesigned Labour Force Survey Questionnaire (cat. no. 6295.0) and Information Paper: Questionnaires Used in the Labour Force Survey (cat. no. 6232.0).

#### **SURVEY SAMPLE REDESIGN**

15 The Labour Force Survey sample was last reselected using information collected in the

16 The bulk of the new sample was phased in over the period November 2002 to June 2003, with one-eighth of this portion of the sample being introduced every month. The remainder of the sample (about 18% of the total), which covers less settled areas of Australia and non-private dwellings was rotated in full for New South Wales, Victoria, Tasmania, Northern Territory and Australian Capital Territory in November 2002, and for Queensland, South Australia and Western Australia in December 2002. Such a pattern of implementation means that any changes to labour force estimates due to differences between the two samples, or any other influences, were spread over the eight months.

17 For further details, see Information Paper: Labour Force Survey Sample Design (cat. no. 6269.0) and Technical Report: New Labour Force Survey sample selections: analysis of the effect on estimates in the October 2003 issue of Australian Labour Market Statistics (cat. no. 6105.0).

#### **RELIABILITY OF ESTIMATES**

- **18** Two types of error are possible in an estimate based on a sample survey: sampling error and non-sampling error.
- 19 Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors. Standard errors of estimates for the latest month and of estimates of movements since the previous month are shown on pages 27 and 28. Standard errors of other estimates and other movements may be determined by using information in the paper Labour Force Survey Standard Errors (cat. no. 6298.0) which is available free on this site.
- **20** Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey. The Labour Force Survey receives a high level of co-operation from individuals in selected dwellings, with the average response rate over the last year being 96%. See Glossary for definition of response rate.

#### SEASONAL ADJUSTMENT AND TREND ESTIMATION

**21** Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove the irregular or non-seasonal influences which may be present in any particular month. This means that month-to-month movements of the seasonally adjusted estimates may not be reliable indicators of trend behaviour.

- 22 The Labour Force Survey uses the concurrent seasonal adjustment method to derive seasonal factors. Concurrent seasonal adjustment uses data up to the current month to estimate seasonal factors for the current and all previous months. This process can result in revisions each month to estimates for earlier periods. However, in most instances, the only noticeable revisions will be to the seasonally adjusted estimates for the previous month and one year prior to the current month.
- 23 Seasonal adjustment is able to remove the effect of events which occur at the same time in the survey every year. However, there are some events, like holidays, which are not always at the same time in the survey cycle or which are not at the same time across Australia. The effects of these types of events on LFS estimates cannot in all cases be removed, because the pattern of their effects cannot be determined. However, two events which are adjusted for in the seasonally adjusted series are the January interview start date and the timing of Easter.
- **24** For more information on concurrent seasonal adjustment and survey proximity to holiday periods, see **Information Paper: Forthcoming Changes to Labour Force Statistics** (cat. no. 6292.0).
- 25 While seasonal factors for the complete time series are estimated each month, they will continue to be reviewed annually at a more detailed level to take into account each additional year's original data. This annual review will not normally result in significant changes to published estimates. The review will be conducted in February each year with the results released in the February issue of this publication.
- **26** The smoothing of seasonally adjusted series to produce 'trend' series reduces the impact of the irregular component of the seasonally adjusted series. These trend estimates are derived by applying a 13-term Henderson-weighted moving average to all months except the last six. The last six monthly trend estimates are obtained by applying surrogates of the Henderson average to the seasonally adjusted series. Trend estimates are used to analyse the underlying behaviour of a series over time.
- **27** While this smoothing technique enables estimates to be produced for the latest month, it does result in revisions in addition to those caused by the revision of seasonally adjusted estimates. Generally, revisions due to the use of surrogates of the Henderson average become smaller, and after three months have a negligible impact on the series.
- 28 Trend estimates are published for the Northern Territory in table 10 and for the Australian Capital Territory in table 11. Unadjusted series for the two territories have shown, historically, a high degree of variability, which can lead to considerable revisions to the seasonally adjusted estimates each month when seasonal factors are estimated. For this reason, seasonally adjusted estimates are not currently published for the two Territories. In addition, caution should be exercised in the interpretation of trend estimates for the two territories, particularly for the three most recent months, where revisions may be relatively large.
- **29** For further information, see **A Guide to Interpreting Time Series Monitoring Trends** (cat. no. 1349.0) or contact the Assistant Director, Time Series Analysis on (02) 6252 6345.

#### **RELATED PUBLICATIONS**

**30** Users may also wish to refer to **Australian Labour Market Statistics** (cat. no. 6105.0). This publication contains additional tables and a detailed list of related publications. For further information about this publication, please contact the Assistant Director, Labour Market Statistics on (02) 6252 7636.

**31** ABS Information about the labour market can be found on the Labour theme page on the ABS web site <a href="https://www.abs.gov.au">https://www.abs.gov.au</a> (Themes), or from ABS Bookshops.

**32** Current publications and other products released by the ABS are listed in the **Catalogue of Publications and Products** (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <a href="https://www.abs.gov.au">https://www.abs.gov.au</a> (AusStats). The ABS also issues a daily Release Advice on the web site (AusStats) which details products to be released in the week ahead.

### **DATA AVAILABLE ON REQUEST**

**33** As well as the statistics included in this and related publications, the ABS may have other relevant data available. Inquiries should be made to Michael Johnson on (02) 6252 6525 or to any ABS office.

#### **EFFECTS OF ROUNDING**

**34** Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

**35** Estimates of movement shown in this publication are obtained by taking the difference of unrounded estimates. The movement estimate is then rounded to one decimal place. Therefore where a discrepancy occurs between the reported movement and the difference of the rounded estimates, the reported movement will be more accurate.

#### SYMBOLS AND OTHER USAGES

**36 SYMBOLS AND OTHER USAGES** 

pts percentage points

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